

Chemistry

Group-II

Paper-II

Time: 15 Minutes

(Objective Type)

Marks: 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1- The units of equilibrium constant  $K_c$  for reaction in the balance chemical equation  $N_2 + 3H_2 \rightleftharpoons 2NH_3$  are:

- (a)  $\text{mol dm}^{-3}$  (b)  $\text{mol}^{-1} \text{dm}^{-3}$   
 (c)  $\text{mol}^{-2} \text{dm}^6$  ✓ (d) No units

Reactions which have comparable amounts of reactants and products at equilibrium state have:

- (a) Very small  $K_c$  value  
 (b) Very large  $K_c$  value  
 (c) Moderate  $K_c$  value ✓  
 (d) None of these

Potassium ferrocyanide  $K_4[Fe(CN)_6]$  is:

- (a) Acidic salt (b) Basic salt  
 (c) Double salt (d) Complex salt ✓

The conjugate acid of  $HPO_4^{2-}$  is:

- (a)  $PO_4^{3-}$  (b)  $H_2PO_4^{2-}$   
 (c)  $H_2PO_4^-$  ✓ (d)  $H_3PO_4$

The molecular formula of Decane is:

- (a)  $C_{10}H_{22}$  ✓ (b)  $C_{10}H_{20}$   
 (c)  $C_{10}H_{18}$  (d)  $C_{10}H_{21}$



- 6- The oxidation of alkenes produce:  
(a) Glyoxal (b) Glycol ✓  
(c) Oxalic acid (d) Formic acid
- 7- The formula of stearic acid is:  
(a)  $C_{14}H_{31}COOH$  (b)  $C_{15}H_{31}COOH$   
(c)  $C_{16}H_{31}COOH$  (d)  $C_{17}H_{35}COOH$  ✓
- 8- Night-blindness is because of deficiency of:  
(a) Vitamin A ✓ (b) Vitamin E  
(c) Vitamin C (d) Vitamin D
- 9- Normally rainwater is weakly acidic because of:  
(a)  $SO_3$  gas (b)  $CO_2$  gas ✓  
(c)  $SO_2$  gas (d)  $NO_2$  gas
- 10- Specific heat capacity of water is:  
(a)  $4.2 \text{ KJg}^{-1} \text{ K}^{-1}$  (b)  $4.2 \text{ Jg}^{-1} \text{ K}^{-1}$  ✓  
(c)  $2.4 \text{ Jg}^{-1} \text{ K}^{-1}$  (d)  $2.4 \text{ KJg}^{-1} \text{ K}^{-1}$
- 11- Temporary hardness of water is due to:  
(a)  $Ca(HCO_3)_2$  ✓ (b)  $CaCO_3$   
(c)  $MgCO_3$  (d)  $MgSO_4$
- 12- The composition of carbon in fuel oil is:  
(a)  $C_7$  to  $C_{10}$  (b)  $C_{10}$  to  $C_{12}$   
(c)  $C_{13}$  to  $C_{15}$  (d)  $C_{15}$  to  $C_{18}$  ✓